for example, claim 18 and many of the other claims.

Guadino discloses AOTFs cascaded together in a node architecture for adding/dropping wavelengths of a wavelength division multiplexed (WDM) light.

However, as recognized by the Examiner in the last paragraph on page 2 of the Office Action, Gaudino fails to specifically teach that the phase of a beat generated by the RF signals applied to the first optical filter is different than a phase of a beat generated by the RF signals applied to the second optical filter.

Therefore, the Examiner combines Gaudino with Thompson to reject the claimed invention.

Thompson relates to the use of acoustooptic devices *in a laser or other optical resonator to produce wavelength-dependent deflection*. See, for example, the Abstract; FIG. 1, and column 5, line 61, through column 6, line 38, of Thompson. It is respectfully submitted that the use of an acoustooptic device in a laser or other optical resonator to produce wavelength-dependent deflection is significantly different than, and non-analogous to, the use of AOTFs in a node architecture for adding/dropping wavelengths of a wavelength division multiplexed (WDM) light.

For example, Thompson relates to *deflecting* a light to tune a laser cavity, whereas Gaudino relates to *filtering* a WDM light to thereby switch different wavelengths of the WDM light to different output ports. Moreover, the light in Thompson is laser light, whereas the light in Gaudino is WDM light.

Accordingly, it is respectfully submitted that Gaudino and Thompson are clearly non-analogous art and should not be combined for the purpose of this rejection.

Moreover, the Examiner asserts that column 6, lines 2-13, of Thompson, teach that it is well known in the art to configure cascaded AOTFs so that a phase of a beat generated by the RF signals applied to the first AOTF are different than a phase of a beat generated by the RF signals applied to the second AOTF. See the Examiner's comments in the last sentence on page 2 of the Office Action through the first line on page 3 of the Office Action. However, it is respectfully submitted that column 6, lines 2-13 of Thompson, cited by the Examiner, relate to an acoustooptic deflector (AOD). For example, this portion of Thompson specifically indicates that it refers to an "AOD". As indicated on column 1, lines 43-58, of Thompson, an AOD is a specific type of acoustooptic device used to vary the deflection angle of a beam. By contrast, Gaudino relates to AOTFs, which are different devices from AODs. See, for example, column 1, line 43 through column 2, line 4, of Thompson, discussing differences between AODs and

AOTFs. Therefore, it is respectfully submitted that the cited portion of Thompson should not be combined with Gaudino in the manner suggested by the Examiner.

Claims 2, 5, 37 and 41 relate to the differences in phase of beats as being equal to a value obtained by dividing 180° by the number of stages. On page 3 of the Office Action, the Examiner asserts that such a difference in phase of beats would be obvious over Gaudino in view of Thompson. However, it is respectfully submitted that neither reference relates to, or suggests, any type of relationship between the phase of the beats, the numbers of stages, and 180°. Moreover, it is respectfully submitted that neither reference indicates why such a relationship would be necessary. Therefore, it is respectfully submitted that claims 2, 5, 37 and 41 are patentable over the combination of Gaudino and Thompson.

Claims 10 and 53 relate to first, second and third optical filters arranged in a specific manner. Similarly, claims 18, 62 and 64 relate to first, second and third AOTFs arranged in a specific manner. On pages 3-4 of the Office Action, the Examiner asserts that such arrangements would be obvious over Gaudino in view of Thompson. The Examiner specifically refers to the second paragraph on page 79 of Gaudino as suggesting that greater than two AOTFs can be cascaded. However, from a review of Guadino, it is respectfully submitted that no portion of page 79, or any other portion of Gaudino, suggests that more than two AOTFs can be cascaded. For example, each configuration in Gaudino, such as those in FIGS. 1 and 5 of Gaudino, disclose the use of only two AOTFs. Regardless, it is respectfully submitted that neither references discloses or suggests the specific phases of the beats as recited in the claims.

The above arguments are helpful in understanding differences in the various other rejected claims over the combination of Guadino and Thompson.

In view of the above, it is respectfully submitted that the rejection is overcome.

III. REJECTION OF CLAIMS 16, 17, 23, 24, 33, 34, 60, 61, 69 AND 70 UNDER 35 USC 103 AS BEING UNPATENTABLE OVER GAUDINO IN VIEW OF THOMPSON AND CHEUNG, U.S. PATENT NO. 4,906,064

The arguments in Section II, above, for distinguishing over Guadino and Thompson, also apply here.

Rejected claims 16, 17, 23, 24, 33, 34, 60, 61, 69 and 70 relate to first, second and third optical filters or AOTFs being formed on a single substrate. The claims recite specific arrangements on the substrate.

Cheung discloses a complex switching system which comprises a plurality of 2X2 switching elements and the use of an AOTF as a mode toggle control element. See, for example, FIG. 1; column 2, lines 52-55; and column 3, line 8, through column 4, line 5, of Cheung.

However, no portion of Cheung discloses or suggests that all the elements are formed on a single substrate.

Therefore, none of the references, taken individually or in combination, disclose or suggest first, second and third optical filters or AOTFs as being formed on a single substrate in a specific arrangement as recited in the rejected claims.

In view of the above, it is respectfully submitted that the rejection is overcome.

IV. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required in connection with the filing of this response, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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